the pulse pressure is an important factor in determining the efficiency of the circulation and is of more value in prognosis than the systolic pressure. He conducted blood pressure estimations in 20 patients with permanent hypertension—chiefly cardio-renal cases—all showing a continued systolic pressure of 180 mm. or over—to determine the effects of various pressure lowering agents on the diastolic pressure. The systolic pressure was first taken at the point where the pulse first appeared at the wrist after complete obliteration and the diastolic pressure then ascertained by the auscultatory method. Lawrence gives the results of the observation in charts and tables in his article and draws a number of conclusions from his work. Reduction of systolic pressure by the use of nitrites, venesection, hot air, or electricity, is accompanied by a fall of diastolic pressure amounting, as a rule, to approximately one-half of the systolic fall. Such a reduction produces a coefficient of pressure more nearly approaching the normal than that pervailing in conditions of hypertension. Sodium nitrite reduces diastolic pressure more rapidly than the more complex compounds, thus causing a shorter initial diminution of pulse pressure than mannitol or erythrol. The effect on the pulse is more marked than that of the other drugs, the duration of its action is slightly less. None of the nitrite group is efficient for maintaining a pressure at a permanently lowered level as a tolerance is soon required, and increasing the dose is apt to cause unpleasant symptoms. Venesection has a more lasting effect in lowering the pressure than have any of the drugs used by Lawrence. The diastolic pressure is depressed longer than the systolic, the pulse pressure thus being increased. The effect of hot air baths, electric light baths, and high frequency currents is uncertain; a fall in pressure, if produced is transient. Vasotonin is not certain in its action and is not safe to use in cases showing marked hypertension, an increase of which might bring about untoward results. In each of the 5 cases, in which this agent was used, it caused a rise in both the systolic and diastolic pressures, in one instance accompanied by a severe anginal attack and in another by marked vertigo. He adds that in cases with permanent hypertension the effect on renal function of lowering the general pressure is an important and interesting point which will be discussed in a later paper.

The Treatment of Scarlet Fever with Injections of Serum from Convalescents.—Reiss and Jungmaun (*Deutsch. Archiv f. klin. Med.*, 1912, cvi, 70) report 12 cases of severe scarlet fever treated by injections of blood serum obtained from patients convalescing from scarlet fever. They injected from 40 c.c. to 100 c.c. of mixed serum from several scarlet fever convalescents intravenously. The disease was unusually severe in each case treated and the authors attributed the marked improvement in the general condition of these patients entirely to the injection. The temperature dropped 3° C. in from nine to fourteen hours with a corresponding drop in the pulse rate. The treatment seemed to have no effect at all upon local lesions in the throat, lymph nodes, or joints. This fact is regarded by the authors as proof of the specific action of the serum, as fever and general condition improved so markedly, notwithstanding the persistence or a definite increase in local inflammatory processes. The fever terminated by crisis in 10 of the cases treated by serum while this occurred in only 2 cases out of 200 not treated by the serum. The patients treated by the serum all convalesced more quickly than the untreated cases. The authors believe that this treatment must be applied early in the course of the disease to be effectual. The serum should be from convalescent cases at about the eighteenth to the twenty-fourth day of the disease. The mixed serum from at least 1 patient should be tested before injection by inoculation and for the Wassermann reaction. For the sake of convenience they put it in anpoules each containing 50 c.c. of the serum to which five drops of a 5 per cent. carbolic acid are added.

The Secondary Effects of Harmonal.—Hesse (*Deutsch. med. Woch.*, 1912, xxxviii, 643) reviews the literation on the use of harmonal and gives in detail a case where the intravenous injection of 20 c.c. of harmonal was followed by severe collapse. His warning is valuable in view of the fact that harmonal is being widely used in post operative cases where there is abdominal distention due to deficient intestinal peristalsis. Hesse believes that harmonal has a marked depressant action upon the blood pressure and he therefore recommends that the blood pressure should be ascertained in every patient before administering the remedy. If the blood pressure is low, it should be considered a contraindication to the use of harmonal. He also suggests that adrenalin should be administered at the same time with harmonal in order to guard against a possible fall in blood pressure. In the case reported by Hesse the injection of harmonal had the desired effect upon the bowels, but he would recommend harmonal only in the most urgent cases because of its marked depressing action upon the circulation.

The Hypodermic Injections of Iron and Arsenic in Secondary Anemia.—Musser (*Boston Med. and Surg. Jour.*, 1912, clxvi, 775) reports a number of cases of secondary anemia treated by hypodermic injections of iron and arsenic. The hypodermic use of iron has been advocated particularly by Italian abservers and the preparations used by them seem to be far better borne than similar preparations made in this country. Musser tried a solution of ferric citrate made in this country but the results obtained by its use were very unsatisfactory. The injection of this ferric citrate solution in doses sufficiently large to give therapeutic results were painful and caused considerable local irritation. In a few cases attacks of vertigo, fainting, and vomiting followed the injections. Musser then tried a combination of iron and arsenic of each 0.06 gram, and sodium glycerophosphate 0.10 gram dissolved in 1 c.c. of distilled water. The resultant solution is placed in small glass ampoules, sterilized, and is ready for instant injection. The solution is free from irritating qualities and may be injected into the muscles of the thigh or into the deltoid muscle. The injections were given, as a rule, twice a week, though in some cases as often as one a day was given for a short time. In several cases the injections were only given once a week. Musser believes this method of procedure is entirely practical in office and dispensary work and that it is a valuable adjunct to the treatment of anemia, secondary to some relatively mild condition. He says that it affords a method of giving the drugs